

## Refine Search

### Search Results -

Terms	Documents
L2 and L5	4

**Database:** US Pre-Grant Publication Full-Text Database  
US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Search:**

### Search History

**DATE:** Thursday, November 18, 2004 [Printable Copy](#) [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<u>L31</u>	l2 and l5	4	<u>L31</u>
<i>DB=USPT; PLUR=YES; OP=OR</i>			
<u>L30</u>	5910676.pn.	1	<u>L30</u>
<u>L29</u>	4334270.pn.	1	<u>L29</u>
<u>L28</u>	4774663.pn.	1	<u>L28</u>
<u>L27</u>	5025138.pn.	1	<u>L27</u>
<u>L26</u>	5787403.pn.	1	<u>L26</u>
<u>L25</u>	5787403.pn.	1	<u>L25</u>
<u>L24</u>	5604341.pn.	1	<u>L24</u>
<u>L23</u>	4430526.pn.	1	<u>L23</u>
<u>L22</u>	3697693.pn.	1	<u>L22</u>
<u>L21</u>	4430526.pn.	1	<u>L21</u>
<u>L20</u>	4567359.pn.	1	<u>L20</u>
<u>L19</u>	4845636.pn.	1	<u>L19</u>

<u>L18</u>	4947028.pn.	1	<u>L18</u>
<u>L17</u>	4947028.pn.	1	<u>L17</u>
<u>L16</u>	5109407.pn.	1	<u>L16</u>
<u>L15</u>	5193057.pn.	1	<u>L15</u>
<u>L14</u>	5193057.pn.	1	<u>L14</u>
<u>L13</u>	5604341.pn.	1	<u>L13</u>
<u>L12</u>	5652786.pn.	1	<u>L12</u>
<u>L11</u>	5699528.pn.	1	<u>L11</u>
<u>L10</u>	5787403.pn.	1	<u>L10</u>

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L9</u>	l2 and l7	3	<u>L9</u>
<u>L8</u>	705.clas.	30163	<u>L8</u>
<u>L7</u>	705/43	562	<u>L7</u>
<u>L6</u>	705/42	628	<u>L6</u>
<u>L5</u>	705/40	1389	<u>L5</u>

DB=USPT; PLUR=YES; OP=OR

<u>L4</u>	5025138.pn.	1	<u>L4</u>
-----------	-------------	---	-----------

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L3</u>	l2 and clos\$	5	<u>L3</u>
<u>L2</u>	L1 and loan near account	21	<u>L2</u>
<u>L1</u>	("atm" or "automated teller machine") near card	2618	<u>L1</u>

END OF SEARCH HISTORY

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L2:-Entry-14-of-21

File: USPT

Oct 16, 2001

DOCUMENT-IDENTIFIER: US 6304860 B1

TITLE: Automated debt payment system and method using ATM network

Abstract Text (1):

An electronic funds transfer methodology for providing access to a plurality of non-bank loan payment processors (loan servicers) through established ATM (automated teller machine) networks, thereby creating a payment system designed to allow a consumer to initiate an electronic transfer of funds from a primary bank transaction account (e.g., checking account, savings account) to a loan servicer to satisfy an outstanding consumer debt or payment obligation. Automated payment of consumer debt obligations through use of an ATM network is facilitated by a processor and associated software, which are employed to combine specific consumer loan payment data with specific depository transaction account information through an electronic ATM network for the purpose of affecting a more efficient loan payment/servicing process. Information relevant to the loan payment is electronically communicated from the loan servicer through software designed to access the servicer's loan database, extract specific fields from designated records, and communicate this information to a third party central computer. The third party central computer reformats the data as necessary, aggregates this information with any similar information received from other loan or debt servicers, and transmits the aggregated information to one or more ATM transaction processors.

Brief Summary Text (4):

ATM network access device 15 may be physically co-located with the ATM banking institution 16, or may be remotely located with respect thereto. In operation, ATM network access device 15 serves as an interface between a user and the ATM network to receive input from the user and to provide necessary output (and funds, when necessary) to the user. ATM network access device 15 retrieves user information from an ATM card inserted by a user to initiate an ATM transaction, and receives appropriate associated PIN information and transaction information from the user. This information is passed through communication path 17 to the ATM banking institution 16. As necessary, information is then transferred through communications path 19 to ATM transaction processor 14. ATM transaction processor 14 identifies the consumer banking institution 18 from the information retrieved from the user's ATM card, and passes the necessary transaction information entered by the user to the appropriate consumer banking institution 18 through communications path 21.

Brief Summary Text (12):

Finally, point-of-sale (POS) transactions are growing more prevalent, with ATM card readers and key pads appearing in grocery stores, convenience stores and gas stations, among others. While the predominant use of the POS terminals has been to speed the check-out time (increase payment efficiency), POS debit transactions have also provided a substitution for cash and have served to reduce the number of checks returned to the vendor due to insufficient consumer funds balances. During a POS transaction, the consumer swipes the ATM (or debit) card through a card reader. Assuming an on-line debit transaction (versus an off-line credit-oriented transaction), the consumer enters a unique personal identification number (PIN), and then waits for the card reader/register to communicate to the transactions

processor the total amount of the sale (i.e., the amount to be debited from the consumer's transaction account). (In U.S. Pat. No. 5,484,988, Delfer describes a similar process that scans a consumer's account information from a physical paper check presented at the point-of-sale.) After receiving verification from the consumer's bank that sufficient funds exist in the consumer's account to cover the transaction and an authorization from the consumer's bank to proceed, the transactions-processor-forwards-to-the-POS-terminal-a-transaction-approval-message (or, in the case of insufficient funds, a denial). Funds are routed from the consumer's bank account to the vendor through an ACH network. This scenario provides efficiencies for the vendor, the bank, and the consumer, but unfortunately requires a purchase transaction to initiate the process. Such a requirement is unrealistic for the repayment of a loan or other debt obligation.

Brief Summary Text (30):

These and other objects are achieved by the present invention, which provides an automated debt payment system and method for providing access to a plurality of non-bank loan payment processors (loan servicers) through established ATM networks, thereby creating a payment system designed to allow a consumer to initiate an electronic transfer of funds from a primary bank transaction account (e.g., checking account, savings account) to a loan servicer to satisfy an outstanding consumer debt or payment obligation. The present invention provides a system and method to facilitate automated payment of consumer debt obligations through the use of an ATM network, wherein a transactions processor and proprietary software are employed to combine specific consumer loan payment data with specific depository transaction account information for the purpose of effecting a more efficient loan payment/servicing process. Information relevant to the loan payment is electronically communicated from the loan servicer through software designed to interact with the servicer's loan database, extract specific fields from designated records, and communicate this information to a third party loan payment facilitator's central computer. The third party loan payment facilitator's central computer reformats the data as necessary, appends this information with any similar information received from other loan or debt servicers, and transmits the appended information to one or more ATM transaction processors.

Detailed Description Text (6):

In accordance with the present invention, 3rd party loan payment facilitator 26 and the loan servicer 24 cooperate with each other and with the ATM network 8 to allow a consumer to complete a loan payment using the ATM network 8, and more particularly, using an ATM network access device 15 (FIG. 1) at the ATM banking institution 16. 3rd party loan payment facilitator 26 makes loan account information available to the ATM network 8 through communications path 31. This information may be uploaded to transaction processor 14 in a bulk transfer on a periodic basis, such as once a day, or may be supplied to transaction processor 14 on a transaction-by-transaction basis. In a case where a bulk transfer is used, communications path 31 may be an intermittent link, such as a dial-up modem connection, that is periodically established when it is necessary to transfer data to transaction processor 14. Conversely, when a transaction-by-transaction transfer is used, communications path 31 must be substantially permanent since transaction processor 14 will request such information any time a consumer initiates an ATM transaction.

Detailed Description Text (8):

3rd party loan payment facilitator 26 and loan servicer 24 are connected and communicate through a communications path 37, which may be any suitable data communications path, such as a dial-up modem connection, leased line, or TCP/IP connection. 3rd party loan payment facilitator 26 receives loan account information from loan servicer 24. While a single communications path 37 and a single loan servicer 24 are shown in FIG. 2 for clarity, in practice the present invention will likely include any number of loan servicers and associated communications paths 37 connected therewith. In such case, 3rd party loan payment facilitator 26 will

collect loan account information from each of the plurality of loan servicers 24 through the communications paths 37 and will process this information as discussed in detail below to generate suitable loan account information for transfer to transaction processor 14 through communications path 31.

Detailed Description Text (12):

Referring now to FIGS. 2 and 3, the process starts in block 300. In block 302 a user initiates an ATM session by inserting his ATM card and entering an appropriate PIN into an ATM network access device, such as an ATM terminal. Once the user has successfully logged into the ATM network, the user may elect to make a loan or debt payment in block 304. The user will be prompted to identify the loan for which he wishes to make a payment, and to indicate the amount of payment that he wishes to make. It should be noted that the user is not obligated to provide detailed information to identify the loan and the payment amount, but rather the user is provided with a series of display prompts that the user can select to make a payment on a debt obligation. Exemplary ATM screen displays and a flow diagram of such screens are provided as Appendix A attached hereto, illustrating the manner in which the present invention facilitates selection of a loan and entry of a payment amount.

Detailed Description Text (17):

In block 314, assuming that sufficient funds exist for the transaction to proceed, transaction processor 14 generates appropriate debit and credit instructions and forwards these instructions to the ACH network 20 in order to initiate the actual transfer of funds between the consumer's banking institution 18 and the loan servicer's bank 22. Specifically, the transaction processor 14 will request the ACH network to debit the consumer's account at the consumer's banking institution 18 by an amount equal to the debt payment amount indicated by the consumer, and will request that a credit be made to the appropriate loan servicer's account at the loan servicer's bank 22. One important feature of the present invention lies in the ability of the present invention to request that multiple credits be made to automatically segregate funds at the loan servicer's bank 22. By so doing, the effort of administration required by the loan servicer 24 is greatly reduced and substantial costs savings can be realized. In block 316, the ACH network will receive these fund transfer requests from the transaction processor and will generate and forward suitable debit and credit transaction requests to the appropriate banking institutions.

Detailed Description Text (32):

Referring to FIG. 7, upon receipt of this information in block 700, loan servicer 24 will save the information in block 702 and update its customer records in block 704 to reflect the payments processed by the ATM network 8, and will further use this information to aid in the settlement verification process and reconciliation of its bank accounts with loan servicer's bank 22. Furthermore, with this timely data, the loan servicers 24 can generate any necessary reports of transactions and current loan balances for forwarding to investors or secondary market agencies as required. Loan servicer 24 will then prepare the data for download the following day to the 3rd party loan payment facilitator in block 706.

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L2: Entry 15-of-21

File:-USPT

Jun-27,-2000

DOCUMENT-IDENTIFIER: US 6081782 A

TITLE: Voice command control and verification system

Brief Summary Text (11):

The present invention is not limited to use in a telecommunications environment. It may be used, for example, in connection with an automated teller machine (ATM) in which a bank customer makes an identity claim by inserting a bank teller machine card into an ATM machine and then issues a voice command to, for example, determine his or her balance or withdraw funds from his or her account. Indeed, the system can prevent unauthorized access, while providing convenient access for authorized individuals, with respect to any resource or device, such as an automobile, a bank vault, and so on.

Detailed Description Text (16):

Referring now to FIG. 6, the format of typical user records stored in database 113 is shown. Each user of the system is assigned a unique user identification code (ID) which is contained in column 601 and which identifies that user's record. The data in each record includes a series of speech commands contained in column 602 that are associated with a series of corresponding actions contained in column 603 that are carried out when the speech command is uttered by an authorized user and recognized by the system. For example, the record for the user with ID 1234 contains commands "home", "office", and "car". When these commands are uttered and recognized, associated telephone numbers (contained in column 603) are dialed. Likewise, the users with ID's 1235 and 9876 have other commands, such as "mom", "dad" and "sis" for user ID 1235, and "home", "fax" and "pager" for user 9876, each of which are associated with different telephone numbers. An additional user with ID 9999 could use the system of the present invention to interact with an ATM machine. For this user, if the word "loan" is uttered and recognized, the balance for a first loan account XXX is retrieved and displayed to the user, while if the word "savings" is uttered and recognized, the balance for a different savings account YYY is retrieved and displayed to the user.

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)